

Application No. 10/642,891
Amendment dated January 9, 2006
Reply to Office Action of July 19, 2005

REMARKS

Applicants wish to thank the Examiner for the care and time taken and acting on this application in the paper mailed July 19, 2005. Claims 2-8, 11-12, and 13-22 are pending in this application. Claim 9 has been withdrawn and new claims 20 and 21 have been added in place. Support for claims 20 and 21 can be found in claim 9 as filed. New claim 22 has been added, support for which may be found in claim 4 as filed, and now amended. New claim 19 has been added, support for which may be found in the specification at page 7, line 10 - page 8, line 10.

The Examiner has rejected claims 16-18 under 35 U.S.C. §112, first paragraph and 35 U.S.C. §132 as presenting new matter. Applicants respectfully traverse this rejection to the extent that it is maintained. The Examiner has also rejected claims 2-9, 11, 12, and 16-18 under 35 U.S.C. §112, second paragraph. Applicants respectfully traverse this rejection to the extent that it is maintained. The Examiner has also rejected claims 2-9, 11, 12, and 16-18 under 35 U.S.C. §103 over Butler et al., U.S. Patent No. 5,766,323. Applicants respectfully traverse this rejection to the extent that it is maintained.

Favorable reconsideration of all claims pending herein is respectfully requested.

The Examiner has rejected claims 16-18 as presenting new matter. Applicants note that claims 16-18 were presented in the paper mailed April 7, 2005. A basis for these claims may be found in claims 1 and 3 as originally filed. This subject matter was canceled from claims 1 and 3 in the same paper mailed April 7, 2005. Applicants wish to thank the Examiner for discussing this rejection and resolving the same in the phone interview of November 22, 2005.

Favorable reconsideration is respectfully requested.

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Turning to the Examiner's rejection of Claims 2-9, 11, 12, and 16-18 under 35 U.S.C. §112, second paragraph. Applicants traverse this rejection. Applicants have amended the claims to overcome the Examiner's concerns. Claim 11 has been amended to clarify the invention casting it as a method claim with two discrete steps, both steps reciting the addition of constituents. The first constituent is added at a concentration level effective to thicken the concrete mixture. The second constituent is added at a concentration level effective to create a hydrophobic effect in the concrete mixture. Concentrations are provided. Respective agents may be found in dependent claims. Concerns about the overlap of constituents should be resolved. Applicants wish to thank the Examiner for the courtesy provided in discussing this matter.

Favorable reconsideration is respectfully requested.

Turning to the Examiner's rejection for obviousness, Claims 2-9, 11, 12, and 16-18 are rejected under 35 U.S.C. §103 based upon Butler et al., U.S. Patent No. 5,766,323. Applicants have traversed this rejection.

The Examiner contends that Butler teaches mixing cement, water, polyacrylate beads, polyoxyethylene wax, and/or organopolysiloxane and that it would be obvious that a cementitious article is made from a cementitious material.

The Examiner also contends that surfactants, air pore formers, retarders, accelerators, colorants, etc. are merely conventional additives.

The Examiner also contends that the addition of the thickener and a hydrophobing agent together or simultaneously or individually is an obvious design choice.

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Applicants respectfully traverse the Examiner's contentions.

Specifically, Applicants request the Examiner provide a specific teaching to support the contention that additives such as those claimed by Applicants have been used in the prior art to make cementitious articles. Applicants request the Examiner provide teachings in the prior art that the addition of surfactants, air pore formers, retarders, accelerators, colorants, etc, are taught in the prior art and common conventional additives. Further, Applicants also traverse the Examiner's contention that the addition of the two ingredients (the thickener and hydrophobing additive) together or simultaneously as one component, or in the alternative by adding them individually one at a time is a mere obvious design choice. Examiner has not provided any teaching that that is in fact the case.

Support for these contentions of obviousness is requested.

The basis of Applicant's claimed invention is that the concrete mixture is formed from the step-wise addition of 1) cement, stone and binder to 2) thickener and hydrophobe. Therein lies the distinction with Butler.

Butler et al., discloses a method of making a cementitious material including cement, water, polyacrylate beads, polyoxyethylene wax, and organopolysiloxane. However, according to paragraph "Preparation of Cementitious Materials", column 6, line 16-28, the method is carried out by mixing sand and cement with water and the organopolysiloxane in a simultaneous manner. (The same explanation can also be found at Butler, Col 4 from line 12, line 34, and line 56).

In contrast, the claimed method mixes cement, grains of stone and make up water in a first step. In a subsequent step, the concrete thickener mixture comprising a thickening agent and a hydrophobing additive are added.

Only by employment of the separate steps of mixing, is the optimum effect of the concrete thickener achieved. At page 7, second full paragraph of Applicant's specification, the direct addition of the concrete thickener mixture (hydrophobing additive and thickener) onto the grains of stone is not possible here.

The addition of concrete thickener is preferably carried out by spraying the concrete thickener onto the mixture of the cement, grains of stone and make up water. By carrying out the claimed two step method, the concrete mixture, which is actually too moist, is converted to a consistency level that can be processed, i.e., slightly moist consistency with a low water/cement ratio.


No hint is given in Butler to change the simultaneous mixing step disclosed therein to provide a two step mixing result in an improved concrete article. Butler et al. does not disclose the production of concrete articles which allow adjusting for higher water to cement values without mandatory changing in consistency of the concrete.

Favorable reconsideration of all claims pending herein is respectfully requested. The Commissioner is hereby authorized to charge any additional fees which may be required in the Application to Deposit Account No. 06-1135.

Respectfully submitted,

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